REMARKS/ARGUMENTS

The Office Action dated March 3, 2010 has been carefully reviewed. Reconsideration of the objections and rejections contained therein is respectfully requested in view of the following remarks. Claims 49-50 are newly added herein. Claims 1-50 are currently pending in the application.

Claim Rejections – 35 USC § 103

Claims 1, 2, 5, 9-11, 14, 16, 17, 20, 24-26, 31, 32, 35, 39, 40 and 43 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto (EP 0 627 827) in view of Shiobara (U.S. Patent Number 5,535,214). Claims 3, 4, 12, 13, 18, 19, 27-29, 33, 34, 41 and 42 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto in view of Shiobara, and further in view of Sherman (U.S. Publication No. 2003/0161340). Claims 6, 15, 21, 30, 36 and 44 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto in view of Shiobara, and further in view of Vadgama (U.S. Publication No. 2003/0083069). Claims 7, 22, 37 and 45 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto in view of Shiobara and Vadgama, and further in view of Holden (U.S. Patent Number 6,134,218). Claims 8, 23, 38 and 46 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto in view of Shiobara, Vadgama, and Holden, and further in view of Sherman (U.S. Publication No. 2003/0161340). Claims 47 and 48 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Berruto in view of Shiobara, and further in view of Bantz (U.S. Patent No. 5,394,433). Applicants respectfully traverse these art grounds of rejection.

Reply to Examiner's Response to Arguments

Since the Examiner has maintained the prior rejections and has provided arguments in support of this position, Applicant will address the Examiner's response first.

In the Office Action dated March 3, 2010, the Examiner disagreed with Applicants' argument distinguishing Berruto from claim 1. In the prior reply, it was explained that Berruto tries to broadly determine whether an allocated rate is sufficient to complete a data transmission operation in a given amount of time. Berruto does so by minimizing the "total cost which must be paid to obtain a predetermined quality" (Berruto: page 4, lines 34-36). Berruto does not teach using the arrangement of the data to be transmitted in the cost-evaluation process when the control unit tries to determine an acceptable rate allocation.

The Examiner noted that "analyzing the actual arrangement, or order of data to be transmitted" was not claimed. Applicants note that the language was used to emphasize the differences between claim 1 and Berruto. The feature "determining a data rate for transmission of the packets of data based on the arrangement...," as recited in claim 1, is sufficiently distinguished from Berruto for at least the reasons noted above and in the prior response dated November 25, 2009.

The Examiner further asserts Berruto discloses the step of "determining packets of data for transmission from the mobile station" as recited in claim 1. Regarding this feature, the Examiner asserts the following.

> [T]his teaching means the arrangement of data to be transmitted is analyzed and the data rate is allocated based on this arrangement because Berruto specifically identify or determine what packets are ready to be transmitted, which is also considered as the order of packets to be transmitted, and the data rate is allocated based on the identified packets; hence, the data rat is allocated based on the arrangement of these packets.
> (See Office Action: page 2, lines 12-17.)

Applicants respectfully disagree, as Berruto silent with respect to arrangement of packets. The Examiner appears to be improperly interpreting Berruto in asserting that "determining what packets are ready to be transmitted" must equate to their arrangement in a queue. The selection of packets for transmission as taught by Berruto does not teach or suggest their arrangement or order for transmission.

Moreover, as best as Applicants can tell, it appears the Examiner is inconsistent as to how claim 1 is being read onto Berruto. In the Office Action dated August 5, 2009, the feature "determining packets of data ..." recited in claim 1 is purportedly taught in paragraphs 0011 and 0017-0018. While the feature "determining a data rate for transmission ..." is purportedly taught in paragraphs 0012, 0020, 0023 and 0032. (See Office Action: August 5, 2009, pages 6-7, bridging paragraph). However, in the Final Office Action, it appears the Examiner is indicating that the feature "determining packets of data for transmission ..." is being analyzed in a manner which appears to be intertwined with the feature "determining a data rate for transmission of the packets of data based on the arrangement of said packets of data." (See Final Office Action of March 3, 2010: page 2, lines 10-17.) If the Examiner maintains this position, it is respectfully requested that this position be clarified so Applicants may adequately respond to the rejection.

Regarding the teachings of Berruto at paragraphs 0012, the reference merely generally describes a method of "controlling transmission on a same radio channel of variable-rate information streams related to the same communication and originated by different sources, in which each stream is emitted by a source at a rate which is selected, in a given time interval, within a respective set of source rates and the stream is associated, before being sent on the channel, to a redundancy which is selected within a set of possible redundancy schemes and determines an increase of the stream rate."

Regarding the teachings of Berruto at paragraph 0020, the reference merely discloses that the needs of speech and signaling can be represented by information related to the rate best suited for coding that particular speech segment or for signaling transmission in that stage. Channel conditions, which can vary in time and position, can be represented by information on the measured error rate, determining the protection needs of the signals and therefore the redundancy which channel coders must introduce.

Regarding the teachings of Berruto at paragraph 0023, the reference merely discloses that rates $r_1 \ldots r_4$ may be determined by a controller (UC1) so as to satisfy the rate and protection requirements of different streams, if this is allowed by system conditions. Otherwise the rates are determined so as to minimize the total cost which must be paid to obtain a predetermined quality. Total cost is represented by the sum of the costs linked with the individual needs. The costs are digital values which give an indication of the distortion associated with a certain rate of

the coded signal (for speech) or with certain conditions of the channel or system, or of the time required for the execution of a procedure (for control signals).

Regarding the teachings of Berruto at paragraph 0032, the reference merely discloses that costs c1 can express a measure of the perceptual distortion associated with a particular combination requested rate/allocable rate. Costs c2 can be the expression of the quality of service represented. These costs may be stored in a number of cost matrices for processing by the cost minimization algorithm.

As can be seen from the aforementioned characterizations of paragraphs 12, 20, 23 and 32, Berruto fails to teach or suggest "determining a data rate for transmission of the packets of data based on the arrangement of said packets of data in said queue allowing for meeting the transmission deadline for each of said packets of data" as recited in claim 1.

Finally, the Examiner asserted that "Berruto calculates data rate that enables to minimize or meet costs, which is considered a transmission deadline. This teaching is another indication that Berruto also discloses arrangement of data packets because the packets of data to be transmitted in the order such that the transmission meets the deadline requirement." (See Final Office Action: pages 2-3, bridging paragraph.) Applicants respectfully disagree, and suggest that the Examiner's interpretation of costs is inconsistent with the reference. As noted above, costs may express a measure of perceptual distortion, or express the quality of the service represented. Berruto fails to teach that costs are associated with an arrangement of data packets.

Accordingly, because Berruto fails to teach or suggest all of the features recited in claim 1, and further because Shiobara fails to cure these deficiencies, Applicants request that the rejection of claim 1 be withdrawn. Claims 9, 16, 24, 36 and 39 recite related subject matter in this respect, and are allowable at least for similar reasons.

The, Sherman, Vadgama, Holden and Bantz references fail to cure the above-noted deficiencies of claim 1. Accordingly, claims depending from independent claims 1, 9, 15, 24, 36 and 39 are allowable at least by virtue of their dependency.

SUMMARY

Since the Examiner has maintained his rejection of claims 1-48 under 35 U.S.C. § 103 as noted above, Applicant once again traverses these rejections. Applicant expressly maintains the reasons from the prior responses to clearly indicate on the record that Applicant has not

conceded any of the previous positions relative to the maintained rejections. For brevity, Applicant expressly incorporates the prior arguments presented in the November 25, 2009 response without a literal rendition of those arguments in this response.

For at least the foregoing reasons and the reasons set forth in Applicant's response of November 25, 2009, it is respectfully submitted that claims 1-48 are distinguishable over the applied art. The remaining dependent claims are allowable at least by virtue of their dependency on the above-identified independent claims. See MPEP § 2143.01. Moreover, these claims recite additional subject matter, which is not suggested by the documents taken either alone or in combination.

For example, claim 5 recites "determining whether available resources allows for allocation at said base station for transmission from said mobile station at said data rate." The Examiner interprets this step as "assessing a transmission rate as described at paragraph 0012." (See Office Acton: page 8, lines 9-14.) Applicant respectfully submits that the Examiner is improperly interpreting claim 5. The feature "determining whether available resources allows for allocation ... at said data rate" is distinguished from the Berruto's teaching of "selecting a source rate within a respective set of source rates," as set forth at page 2, lines 48-52 of the reference. Applicants therefore respectfully request that the Examiner withdraw the rejection of claim 5.

New Claims

Claims 49-50 depend from independent claim 1 and are allowable at least by virtue of their dependency.
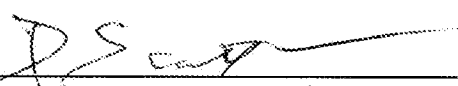
CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: 6/2/10

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